

Comparisons of Job Characteristics

Focus Occupation: [Computer Hardware Engineers \(17-2061\)](#)

Associated Occupation: [Computer Support Specialists \(15-1041\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Computer Hardware Engineers (17-2061)

Associated Occupation: Computer Support Specialists (15-1041)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Computers and Electronics	8.4	22.0	22.7	0	Current knowledge level may be sufficient
Customer and Personal Service	11.3	18.9	11.0	<<	Extensive education and/or training may be required
Clerical	7.3	11.8	5.3	<<	Extensive education and/or training may be required
Telecommunications	3.9	11.2	11.6	0	Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 82

Focus Occupation: Computer Hardware Engineers (17-2061)

Associated Occupation: Computer Support Specialists (15-1041)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Instructing	7.8	10.3	9.1	<	A higher skill level may be required
Troubleshooting	4.5	7.7	8.3	0	Current skill level may be sufficient
Installation	1.7	3.9	2.8	<<	Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 94

Focus Occupation: Computer Hardware Engineers (17-2061)
Associated Occupation: Computer Support Specialists (15-1041)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Oral Comprehension	12.5	14.3	15.3	0	Current ability level may be sufficient
Oral Expression	12.4	14.3	14.2	0	Current ability level may be sufficient
Written Comprehension	11.0	12.9	14.2	>	Current ability level is likely sufficient
Written Expression	9.8	11.6	12.8	>	Current ability level is likely sufficient
Near Vision	11.1	11.5	10.8	0	Current ability level may be sufficient
Information Ordering	9.9	11.2	11.4	0	Current ability level may be sufficient
Problem Sensitivity	11.1	10.8	13.6	>	Current ability level is likely sufficient
Inductive Reasoning	10.2	10.7	13.6	>>	Current ability level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 80

Focus Occupation: Computer Hardware Engineers (17-2061)
Associated Occupation: Computer Support Specialists (15-1041)

Work Activities	Exclusivity of Activity
Communicate technical information	4
Evaluate computer system user requests or requirements	81
Evaluate prototype computer software systems	89
Follow data security procedures	77
Follow data storage procedures	75
Provide technical computer training	82
Provide technical support to computer users	80
Test computer programs or systems	78
Use computer networking technology	81
Use computers to enter, access or retrieve data	3
Use knowledge of mainframe computers	78
Use relational database software	26
Use spreadsheet software	18
Use word processing or desktop publishing software	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 71

Focus Occupation: Computer Hardware Engineers (17-2061)
Associated Occupation: Computer Support Specialists (15-1041)

Tools and Technologies	Exclusivity
Business function specific software	1
Computers	1
Content authoring and editing software	1
Data management and query software	1
Development software	4
Electronic and communication measuring and testing instruments	14
Industry specific software	1
Light and wave generating and measuring equipment	4
Network applications software	1
Operating environment software	12

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.